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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/897,848	07/02/2001	Narayan L. Gehlot	Gehlot 22	1077

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TROUTMAN, SANDERS, MAYS & VALENTINE  
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EXAMINER

TRAN, DZUNG D

ART UNIT PAPER NUMBER

2633

DATE MAILED: 05/07/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/897,848

Applicant(s)

GEHLOT, NARAYAN L.

Examiner

Dzung D Tran

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Specification***

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 8, 10-12, 14-23 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Fee US patent no. 6,108,113.

Regarding claims 1 and 15, Fee discloses method for acquiring operating parameters in a communications system operable to transmit a data signal (figure 6A, element 602, col. 9, lines 52-53), the method comprising the steps of:

generating at least one operating parameter carrier (figure 6A, element 610, col. 9, line 54) having a frequency value (10 MHz) in a vicinity of a null of a data spectrum of the data signal; modulating the at least one operating parameter carrier; summing the operating parameter carrier with the data signal (figure 6A, element 606, col. 9, lines 52-58); transmitting the summed signal; and recovering the at least one operating parameter carrier from the summed signal (figure 6A, col. 10, lines 12-31).

Regarding claims 2, 5, 16 and 23, Fee further discloses the monitor subcarrier signal (same as operating parameter carrier) having frequency value 1 KHz to 10 MHz (i.e. 1 KHz, 10KHz, 1MHz ... 10MHz) (figure 8A, col. 10, lines 66-67).

Regarding claim 3, Fee further discloses the data rate signal can be an OC1 to OC-192 (col. 5, lines 33, 46, col. 12, line 1) (i.e. at least one optical channel).

Regarding claims 4, 17 and 25, Fee, in figure 6A, 8 and 9 shown monitor subcarrier signal (same as operating parameter carrier) is a sinusoid.

Regarding claims 6 and 21, Fee further discloses system comprises a wavelength division multiplexed communications system (col. 13, line 46).

Regarding claims 8, 12 and 22, Fee further discloses system the data spectrum is an NRZ spectrum (col. 10, lines 63-67).

Regarding claim 10, Fee further discloses monitor subcarrier signal (same as operating parameter carrier) having limiting bandwidth at 10MHz (figure 6A, element 610, col. 9, line 54).

Regarding claims 11, 14, 18 and 19, Fee further discloses LPF 672 for filtering bandwidth of the summed signal (figure 6A, 9).

Regarding claim 20, Fee further discloses the summer for summing the operating parameter carrier with the data signal (figure 6A, element 606, col. 9, lines 52-58).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7, 9, 13, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fee US patent no. 6,108,113 in view of Kushita US patent no. 6,570,689.

As per claims above, Fee discloses all the limitation except for the data spectrum is in RZ format, transmitting the RZ data format and convert the RZ data format into NRZ data format. Kushita disclose a communication system that generates an RZ pulse signal and output it to the demodulation circuit that converts the RZ data format into NRZ data format (col. 3, line 62 to col. 4, line 7). Since RZ format is less adversely affected by nonlinearities of optical fiber transmission paths despite the fact that self-phase modulation is enhanced in RZ due to its relatively high pulse peak power and RZ signals have the advantage of achieves better performance than NRZ signal for propagation in SMF, it would have been obvious to an artisan at the time of the invention was made to include the RZ data format taught by Kushita in the system of Fee. One of ordinary skill in the art would have been motivated to do this in order to transmit the optical signal over the long distance path (100 Km or more), specially over the single mode fiber.

5. According to file record, there was an IDS filed on 08/08/2001. However, examiner can not locate such IDS in file. Examiner would appreciate resubmission of such IDS statement.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Butman et al. U.S. publication no. 2002/0181052. System and method for optical communication

b. Pettitt et al. U.S. patent no. 5,483,233. Analogue telemetry system and method for fault detection in optical transmission system

c. Fee et al. U.S. patent no. 5,956,165. Method and apparatus for updating subcarrier modulation in a communication network

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung Tran whose telephone number is (703) 305-0932.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jason Chan, can be reached on (703) 305-4729.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



JASON CHAN  
SUPERVISORY PATENT EXAMINER  
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